

REMARKS/ARGUMENTS

Claims 1-4 and 6-8 are pending in the application. The Office Action includes two separate statements of citation and application of the prior art. The first pertains only to claims 1 and 6, or, as it is so stated on page 4, however counsel notes that later on page 6 claims 2-4 are also discussed. Counsel assumes that the examiner meant this as claims 1-4 and 6 as the claims rejected on this particular combination of prior art and the response that follows is based upon this understanding.

Applicants amended their claims on June 3, 2009 to specify that the phosphate was indeed a metal salt of metaphosphoric acid and as a result of this claim amendment it appears the examiner has conducted an additional search and with the use of result directed searching techniques discovered and now applies US 6,057,393 to Hirai. Both rejections now put forward in the current Official Action rely upon this newly cited reference.

Applicants traverse both rejections as they are clearly based upon hindsight reconstruction of the prior art, as evidenced for instance by the newly applied Hirai reference which really doesn't fit conveniently with the other references also applied to the claims in this application.

As to Nakamaru (US'322) and Nakamaru (US'406)

Nakamaru (US'322) states that "Phosphate usable as composition A in the present invention include metal salts thereof such as secondary phosphates and pyrophosphates.". As to concrete examples, there are mentioned calcium hydrogen phosphate and calcium pyrophosphate (refer to column 5, lines 1-6). In Examples of US'322, calcium hydrogen phosphate and calcium pyrophosphate were used.

Nakamaru (US'406) is similar to the above Nakamaru (US'322), it states that "As the phosphate in the present invention, there can be cited a metal salt such as secondary phosphates and pyrophosphates.". Not surprisingly, concrete examples given are calcium hydrogenphosphate and calcium pyrophosphate (refer to column 4, lines 5-10).

Nakamaru (US'406) also reports a technical effect by blending phosphate and barium sulfate simultaneously, where it states that "In the present invention, the above-mentioned effect can be displayed only when the phosphate and barium sulfate are blended simultaneously with the PTFE resin and the glass fiber and/or wollastonite as the reinforcing filler." (refer to column

3, last line to column 4, line 4).

From the above-quoted passages, both Nakamaru (US'322) and Nakamaru (US'406) teach only secondary phosphates and pyrophosphates as the suitable phosphates. Further, Nakamaru (US'322) states that when the component A is selected from the group of phosphates and barium sulfate is blended in PTFE, they have the effect of facilitating formation of a lubricating film of PTFE on the surface (sliding surface) of the a mating member. Yet Nakamaru (US'322) provides no motivation to use a phosphate and barium sulfate in combination. That is, only one component selected from phosphates and barium sulfate is selectively used and there is clearly a reason for this -- Nakamaru (US'322) suggests it is sufficient to attain the desired technical effect by using only one component selected from phosphates and barium sulfate. By implication Nakamaru (US'322) teaches away from the combination.

On the other hand, as seen from the description in the specification, Nakamaru (US'406) is quite clear that the desired technical merit can be obtained in only in case of blending the phosphate and barium sulfate simultaneously into PTFE resin as the main component. Namely, in this case, since the glass fiber and/or wollastonite are blended into PTFE resin as the main component, the phosphates and barium sulfate are simultaneously blended.

From these disparate disclosures, Applicant considers that it is not obvious to use and blend the phosphate and barium sulfate simultaneously in Nakamaru (US'322) merely by referring to the teachings of Nakamaru (US'406) of blending both simultaneously. The two disclosures go in different directions and are not to be combined.

Newly cited Hirai reports that "Examples of phosphates usable in the present invention include metal salts of tertiary phosphoric acid, secondary phosphoric acid, pyrophosphoric acid, phosphorous acid, metaphosphoric acid--" (refer to column 4, lines 1-6). However, only lithium phosphate (metal salts of tertiary phosphoric acid) is used in five examples -- this is the only concrete disclosed component. The above-noted mention of a metal salt of metaphosphoric acid is merely one of several examples of phosphates.

From the above, since Nakamaru (US'322) and Nakamaru (US'406) teach that secondary phosphates and pyrophosphates are exemplified as the suitable phosphates, it is difficult to expect that a skilled person would likely be attracted to use and select a metaphosphate.

The main component of Hirai's composition is PPS. On the other hand, the main

component of the present invention, Nakamaru (US'322) and Nakamaru (US'406) is PTFE. The examiner's attempt to correct Hirai with the other references is nonsense and is clearly driven by orthogonal thinking hindsight-driven application of the prior art.

Further, although the scope in the present invention is a resin composition, in the Examples, the objective product is a multi-layer sliding member. On the other hand, the embodiment of Hirai is only a resin composition -- it is not a multi-layer sliding member.

Still further, the blending ratio in Hirai of PPS is preferably 40 to 80 wt%, more preferably 50 to 70 wt%. The blending ratios of two PTFEs are 3 to 40 wt% and 5 to 40 wt%, respectively. However, in the five Examples, the total blending ratio of the two PTFEs are all 35 wt%.

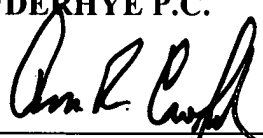
In the present invention, in the Examples, PTFE was used in a blending ratio of 63.5 to 77 wt%.

For the above reasons it is respectfully submitted that all pending claims define allowable subject matter. Reconsideration and favorable action are solicited.

Respectfully submitted,

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